Claims

1. A cellular communications system having a number of communications cells (1) with at least one base station (2) each for cordless communication with a large number of mobile telephones (5), and a home location register (3) for registration of the mobile telephones (5),
characterized in that
- at least one of the mobile telephones (5) can be switched to a passive mode, in which it is not recognizable as a normal network subscriber and detects only a specific search signal for this mobile telephone, and then emits a response signal,
- the home location register (3) has a memory (4) for storing mobile telephones (5) in the passive mode,
- the base stations (2) are designed to send mobile-telephone-specific search signals in a search operation for mobile telephones in the passive mode,
- the home location register (3) has a control device (6), which is designed to initiate at least one search operation at the instigation of an authorized user, and, as a result of response signals received by the base stations (2) from the sought mobile telephone (5), to determine its position and/or status.

2. The cellular communications system as claimed in claim 1,
characterized in that
the passive mode of a mobile telephone (5) can be switched on and off by a user by means of a user identification code.

3. The cellular communications system as claimed in claim 1 or 2,
characterized in that
the mobile telephone (5) is switched on by reception of the search signal.

4. The cellular communications system as claimed in one of claims 1 to 3,
characterized in that
the search signal is encrypted.

5. The cellular communications system as claimed in one of claims 1 to 4,
characterized in that
the search signal is pulsed.

6. The cellular communications system as claimed in claim 5,
characterized in that
a mobile telephone (5) in the passive mode allows periodic reception of the search signal in synchronism with its pulse repetition frequency.

7. The cellular communications system as claimed in one of claims 1 to 6,
characterized in that
the response signal is encrypted.

8. The cellular communications system as claimed in one of claims 1 to 7,
characterized in that
at least one mobile telephone (5) has a memory facility for storing various statuses detected by sensors or capable of being set by a user, the response signal emitted by the mobile telephone (5) transmitting information about the operating statuses stored by the memory.

9. The cellular communications system as claimed in one of claims 1 to 8,
characterized in that
a mobile telephone (5) in the passive mode cannot roam.

10. A method for determining the position of a mobile telephone (5) in a cellular communications network,
the mobile telephone (5) being switchable to a passive mode, in which it is not recognizable as a normal network subscriber and detects only a specific search signal for this mobile telephone (5), and then sends a response signal, and the mobile telephone (5) in the passive mode being stored in the associated home location register (3) of the communications network,
the search operation comprises the following steps:

- emission of the specific search signal by selected base stations (2),
- reception of the response signal from the sought mobile telephone (5) by one or more base stations (2),
- as a result of the recorded response signals, determination of a position area where the sought mobile telephone (5) is located.

11. The method as claimed in claim 10,
characterized in that
the base stations (2) for emitting the search signal are chosen selectively depending on the information stored in the home location register (3).

12. The method as claimed in claim 9 or 10,
characterized in that
the search operation is performed repeatedly.

13. The method as claimed in one of claims 10 to 12,
characterized in that
the search signals and/or response signals are encrypted.

14. The method as claimed in claim 13,
characterized in that

the encryption codes are changed after a search operation.

15. The method as claimed in one of claims 10 to 14,
characterized in that
the mobile telephone (5) in the passive mode is periodically ready to receive the search signal.

16. The method as claimed in claim 15,
characterized in that
the search signal is transmitted in pulsed form.

17. The method as claimed in one of claims 10 to 16,
characterized in that
mobile telephones (5) in the passive mode cannot roam.

18. The method as claimed in one of claims 10 to 17,
characterized in that
a user authorized to execute a search operation is identifiable by means of an identification code.

19. The method as claimed in one of claims 10 to 18,
characterized in that
the signal strength and/or time of reception of a response signal received from the mobile telephone (5) in one or more cells (1) is used for determining the position of the sought mobile telephone (5).

20. A mobile telephone for a cellular communications network, which telephone can be switched to a passive mode, in which the mobile telephone (5) is not recognizable as a normal network subscriber and detects only a specific search signal for this mobile telephone (5), and then sends a response signal in reply.

21. The mobile telephone as claimed in claim 20, characterized in that
the passive mode can be switched on and off by means of a user identification code.

22. The mobile telephone as claimed in claim 19 or 20, characterized in that
the emitted response signal is encrypted.

23. The mobile telephone as claimed in one of claims 20 to 22,
characterized in that
the mobile telephone (5) has one or more sensors for detecting noises, brightness, temperature or similar.

24. The mobile telephone as claimed in one of claims 20 to 23,
characterized in that
the mobile telephone (5) is designed for use only in passive mode.